

Listing of the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1. (Previously presented) An assay for detecting or quantifying A_β peptide which may be present in a candidate solution, comprising:
 - (a) contacting the candidate solution with a solid support with a heavy metal cation immobilized thereon to capture A_β peptide on the surface of the solid support, thereby forming a first complex which comprises solid support/heavy metal cation/A_β peptide;
 - (b) blocking all exposed metal binding sites remaining after A_β capture with a blocker;
 - (c) contacting the first complex, which has been passed through step (b), with a polyclonal antibody specific for A_β peptide to form a second complex which comprises solid support/heavy metal cation/A_β peptide/polyclonal antibody specific for A_β peptide;
 - (d) labelling the second complex to form a detectable third complex which comprises solid support/heavy metal cation/A_β peptide peptide/polyclonal antibody specific for A_β peptide/label; and
 - (e) detecting the third complex, and quantifying A_β peptide which may be present in the candidate solution.

2. (Previously presented) An assay for detecting or quantifying A β peptide which may be present in a candidate solution, comprising:

- (a) contacting the candidate solution with a solid support with a heavy metal cation immobilized thereon to capture A β peptide on the surface of the solid support, thereby forming a first complex which comprises solid support/heavy metal cation/A β peptide;
- (b) blocking all exposed metal binding sites remaining after A β capture with a blocker;
- (c) contacting the first complex, which has been passed through step (b), with a polyclonal antibody specific for A β peptide, called A β antibody, to form a second complex which comprises solid support/heavy metal cation/A β peptide/A β antibody;
- (d) contacting said second complex with one or more anti-antibodies specific to the A β antibody to form a third complex which comprises solid support/heavy metal cation/A β peptide/A β antibody/one or more anti-antibodies;
- (e) labelling said third complex to form a detectable fourth complex which comprises solid support/heavy metal cation/A β peptide/A β antibody/one or more anti-antibodies/label; and
- (f) detecting the fourth complex, thereby quantifying A β peptide which may be present in the candidate solution.

3. (Previously presented) The assay as claimed in claim 1, wherein said heavy metal cation is selected from the group consisting of zinc (II) and copper (II) complexed to nitriloacetic acid.

4. (Previously presented) The assay as claimed in claim 2, wherein said heavy metal cation is selected from the group consisting of zinc (II) and copper (II) complexed to nitriloacetic acid.

5 – 16. (Cancelled)

17. (Previously presented) A kit for carrying out the assay of claim 1 or 2, which comprises a carrier means compartmentalized in close confinement therein to receive one or more container means which comprises a first container means containing a solid support having a heavy metal cation immobilized thereon and a second container means containing a polyclonal antibody specific for A β peptide.

18. (Previously presented) The kit as claimed in claim 17, wherein said heavy metal cation is selected from the group consisting of zinc (II) and copper (II) complexed to nitriloacetic acid.

19. (Previously presented) The kit as claimed in claim 17, wherein said antibody is labeled with a radioisotope.

20. (Previously presented) The kit as claimed in claim 17, wherein said enzyme is horseradish peroxidase.

21. (Previously presented) The kit as claimed in claim 17, wherein said carrier means further comprises a third container means containing an anti-antibody which is specific for the A β antibody.

22. (Previously presented) The kit as claimed in claim 21, wherein said anti-antibody is labeled with a radioisotope.

23. (Previously presented) A kit for carrying out the assay of claim 1 or 2, which comprises a carrier means compartmentalized in close confinement therein to receive one or more container means which comprises a first container means containing a solid support having a heavy metal cation immobilized thereon and a second container means containing a labelled polyclonal antibody specific for A β peptide.

24. (Previously presented) The kit as claimed in claim 23, wherein said heavy metal cation is selected from the group consisting of zinc (II) and copper (II) complexed to nitriloacetic acid.

25. (Previously presented) The kit as claimed in claim 23, wherein the labeled antibody is labeled by a radioisotope.

26. (Previously presented) The kit as claimed in claim 23, wherein said enzyme is horseradish peroxidase.

27. (Previously presented) A kit for carrying out the assay of claim 1 or 2, which comprises a carrier means compartmentalized in close confinement therein to receive one or more container means which comprises a first container means containing a solid support having a heavy metal cation immobilized thereon and a second container means containing a polyclonal antibody specific for A β peptide bound to a labelled anti-antibody.

28. (Previously presented) The kit as claimed in claim 27, wherein said heavy metal cation is selected from the group consisting of zinc (II) and copper (II) complexed to nitriloacetic acid.

29. (Previously presented) The kit as claimed in claim 27, wherein the labeled antibody is labeled by a radioisotope.

30. (Previously presented) The kit as claimed in claim 27, wherein said enzyme is horseradish peroxidase.

31 - 34. (Cancelled)